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May 17, 2007

**EX PARTE**

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW, Portals
Washington, DC 20554

**RE:** **In the Matter of Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadand Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol Subscribership, WC Docket No. 07-38**

**In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, GN Docket No. 07-45**

Dear Ms. Dortch:

Earlier today, Link Hoewing, Will Johnson, Dennis Weller, and I met with Bill Dever, Frederick Helenihi, Heather Hendrickson, Adam Kirschenbaum, Jeremy Miller, Christi Shewman, Tim Stelzig, and Ann Stevens of the FCC's Wireline Competition Bureau to discuss data concerning broadband adoption and deployment internationally, and how the United States compares to other countries in this regard. Among other things, we discussed limitations with the rankings published by the Organization for Economic Co-operation and Development ("OECD"), and reasons why these rankings should not be used as a proxy for broadband adoption in the U.S. or as the primary statistic to evaluate U.S. broadband policies. For example, data from late 2005 and early 2006 that was published by other sources indicate that 42% of U.S. households reported having broadband, compared to 23% of households in the European Union. Verizon also discussed the much higher degree of platform competition that exists in the United States, compared to most other OECD countries, and the high growth rate for fiber-to-the-home subscribers in the United States.

The presentation materials used at the meeting are attached. If you have any questions about this matter or need more information, please do not hesitate to contact me.

Sincerely,

cc: Bill Dever
Frederick Helenihi
Heather Hendrickson
Adam Kirschenbaum
Jeremy Miller
Christi Shewman
Tim Stelzig
Ann Stevens

# Briefing Presentation
# International View of Broadband

Link Hoewing
Vice President, Internet
and Regulatory Affairs

Dennis Weller
Chief Economist

Verizon Communications

May 2007

# How Does the U. S. Rank?

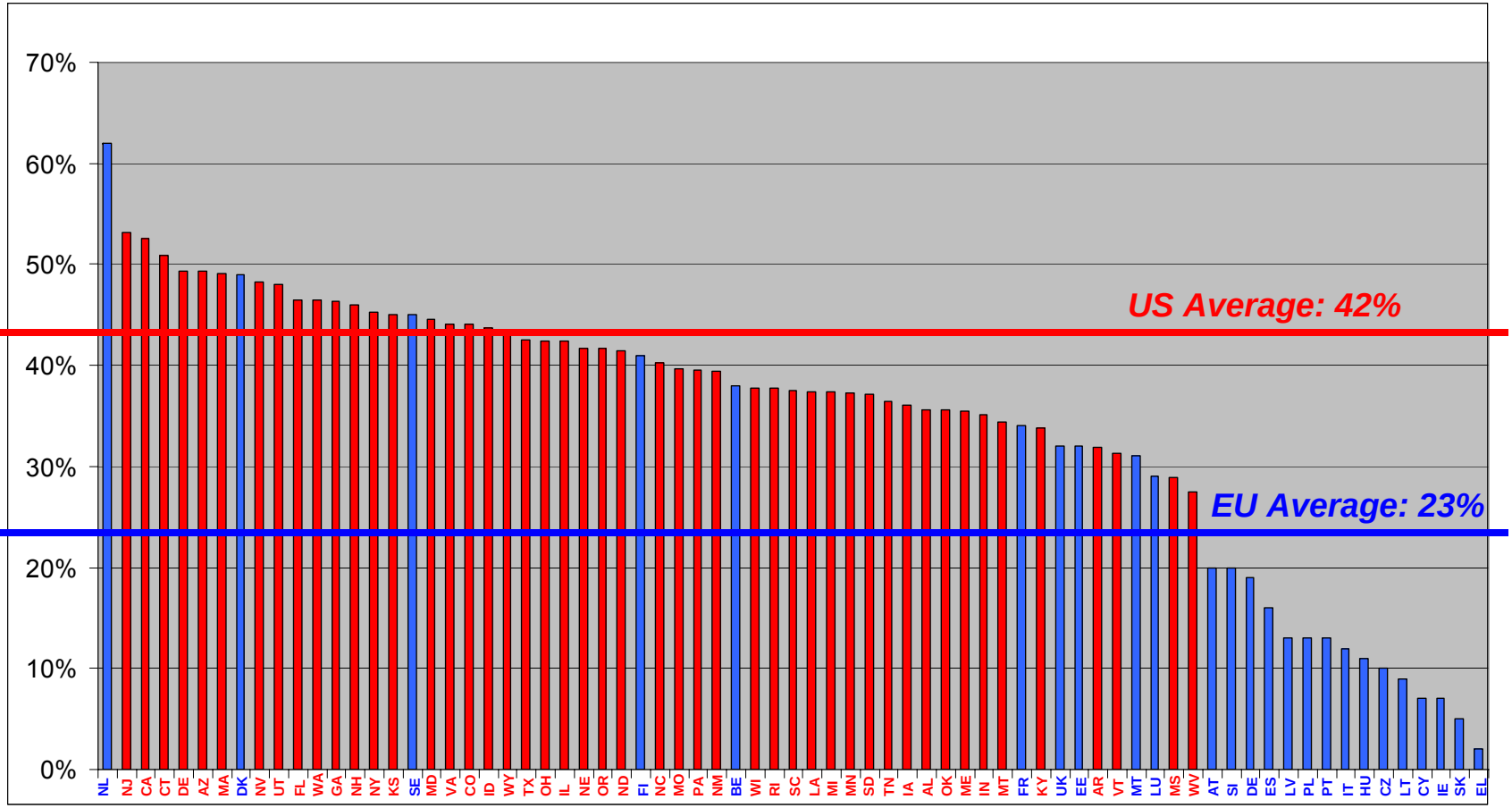
**Broadband subscribers per 100 inhabitants, by technology, Dec. 2006**

| | DSL | Cable | Fibre/LAN | Other | Total | Rank | Total Subscribers |
|---|---|---|---|---|---|---|---|
| Denmark | 19.6 | 9.4 | 2.6 | 0.4 | 31.9 | 1 | 1 728 359 |
| Netherlands | 19.5 | 12.0 | 0.4 | 0.0 | 31.8 | 2 | 5 192 200 |
| Iceland | 28.8 | 0.0 | 0.2 | 0.6 | 29.7 | 3 | 87 738 |
| Korea | 11.4 | 10.7 | 7.0 | 0.0 | 29.1 | 4 | 14 042 728 |
| Switzerland* | 18.8 | 8.8 | 0.0 | 0.9 | 28.5 | 5 | 2 140 309 |
| Norway | 21.7 | 3.8 | 1.5 | 0.6 | 27.7 | 6 | 1 278 346 |
| Finland | 23.5 | 3.5 | 0.0 | 0.3 | 27.2 | 7 | 1 428 000 |
| Sweden* | 16.0 | 5.2 | 0.0 | 4.8 | 26.0 | 8 | 2 346 300 |
| Canada | 11.4 | 12.3 | 0.0 | 0.1 | 23.8 | 9 | 7 675 533 |
| Belgium | 14.0 | 8.4 | 0.0 | 0.1 | 22.5 | 10 | 2 353 956 |
| United Kingdom | 16.5 | 5.1 | 0.0 | 0.0 | 21.6 | 11 | 12 993 354 |
| Luxembourg | 18.2 | 2.2 | 0.0 | 0.0 | 20.4 | 12 | 93 214 |
| France | 19.1 | 1.1 | 0.0 | 0.0 | 20.3 | 13 | 12 699 000 |
| Japan | 11.1 | 2.8 | 6.2 | 0.0 | 20.2 | 14 | 25 755 080 |
| United States | 8.5 | 10.3 | 0.3 | 0.6 | 19.6 | 15 | 58 136 577 |
| Australia* | 15.0 | 3.3 | 0.0 | 1.0 | 19.2 | 16 | 3 939 288 |
| Austria | 10.6 | 6.4 | 0.0 | 0.3 | 17.3 | 17 | 1 427 986 |
| Germany* | 16.4 | 0.5 | 0.0 | 0.1 | 17.1 | 18 | 14 085 232 |
| Spain | 12.1 | 3.1 | 0.0 | 0.1 | 15.3 | 19 | 6 654 881 |
| Italy* | 13.8 | 0.0 | 0.4 | 0.6 | 14.8 | 20 | 8 638 873 |
| New Zealand | 12.7 | 0.6 | 0.0 | 0.7 | 14.0 | 21 | 576 067 |
| Portugal | 8.7 | 5.1 | 0.0 | 0.0 | 13.8 | 22 | 1 460 341 |
| Ireland | 9.1 | 1.3 | 0.0 | 2.0 | 12.5 | 23 | 517 300 |
| Hungary | 6.1 | 3.8 | 0.0 | 2.0 | 11.9 | 24 | 1 198 709 |
| Czech Republic** | 4.8 | 2.1 | 0.0 | 3.7 | 10.6 | 25 | 1 086 620 |
| Poland | 5.2 | 1.6 | 0.0 | 0.1 | 6.9 | 26 | 2 640 000 |
| Slovak Republic | 3.4 | 0.7 | 0.9 | 0.2 | 5.1 | 27 | 274 108 |
| Greece | 4.4 | 0.0 | 0.0 | 0.2 | 4.6 | 28 | 512 000 |
| Turkey | 3.8 | 0.0 | 0.0 | 0.0 | 3.8 | 29 | 2 773 685 |
| Mexico* | 2.7 | 0.8 | 0.0 | 0.0 | 3.5 | 30 | 3 728 150 |
| **OECD** | **10.5** | **4.9** | **1.1** | **0.3** | **16.9** | | **197 463 934** |

**The OECD's October 2006 Broadband Statistics rank the US as 15th in penetration per 100 inhabitants**

# Household Internet Adoption
## Percentage of Households Taking Broadband

# US States & EU Member Countries




*Data from household surveys taken in late 2005 and early 2006. Sources:* European Commission, "E-Communications Household Survey," July 2006; Pew Internet & American Life Project, "Home Broadband Adoption 2006", May 28, 2006; Render Vanderslice & Associates, September 2006

# Broadband Penetration Rankings – Population Density

- **Thirteen of the fourteen countries that the OECD ranks higher are geographically much smaller than the US (the exception is Canada). For example:**
  - ***Sweden*** (173,731 square miles) - comparable in size to California
  - ***Norway*** (125,004 square miles) - comparable in size to New Mexico
- **Nine of the fourteen have population densities that are greater than the US, in some cases far greater**
- **The remaining five have populations that are less dense than the US, but are concentrated in specific areas. For example:**
  - ***Canada*** – less dense than the US overall, but the bulk of its population – 80% – is in fact VERY concentrated in an arc along the US border
  - ***Finland*** – less dense than the US overall (at 130,559 square miles, it is comparable in size to Montana), but much of its population is in fact concentrated in a few cities
  - ***Iceland*** – a population of 300,000 (comparable in size to metro Naples, Florida), of which nearly 200,000 live in the Reykjavik metro area
    - Iceland has 80,000 Bband households today
    - By comparison, that number of households were connected in the US in just over 1 ½ business days last year



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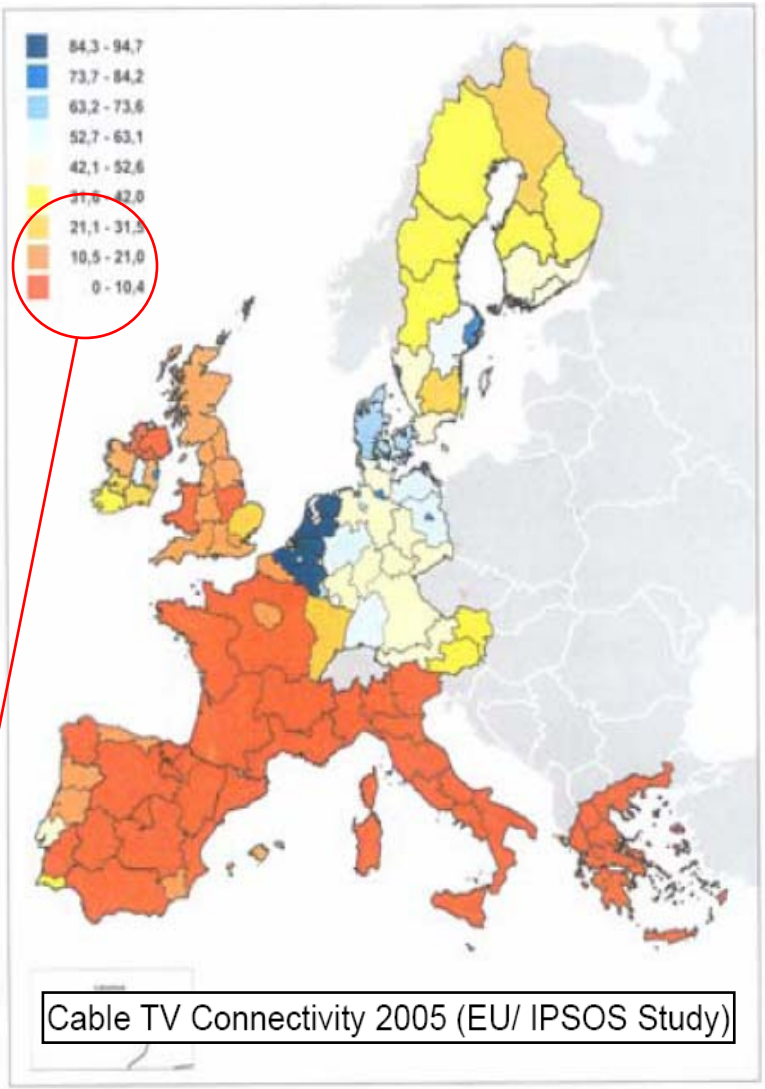
# Platform Competition – Lacking in Europe

| Country | Total country DSL lines | Cable Internet broadband connections (total) | Total Other BB infrast. (FttH, Sat., WLL, other) |
|---|---|---|---|
| **Belgium** | **1,351,482** | 630,000 | 0 |
| **France** | **10,219,301** | 600,000 | 0 |
| **Germany** | **11,305,352** | 284,250 | 76,600 |
| **Italy** | **7,038,612** | 0 | 343,000 |
| **Netherlands** | **2,727,121** | 1,550,000 | 63,000 |
| **UK** | **8,173,113** | 2,870,354 | 8,500 |
| **Europe Total / Average** | **40,757,959** | **5,934,604** | **491,100** |

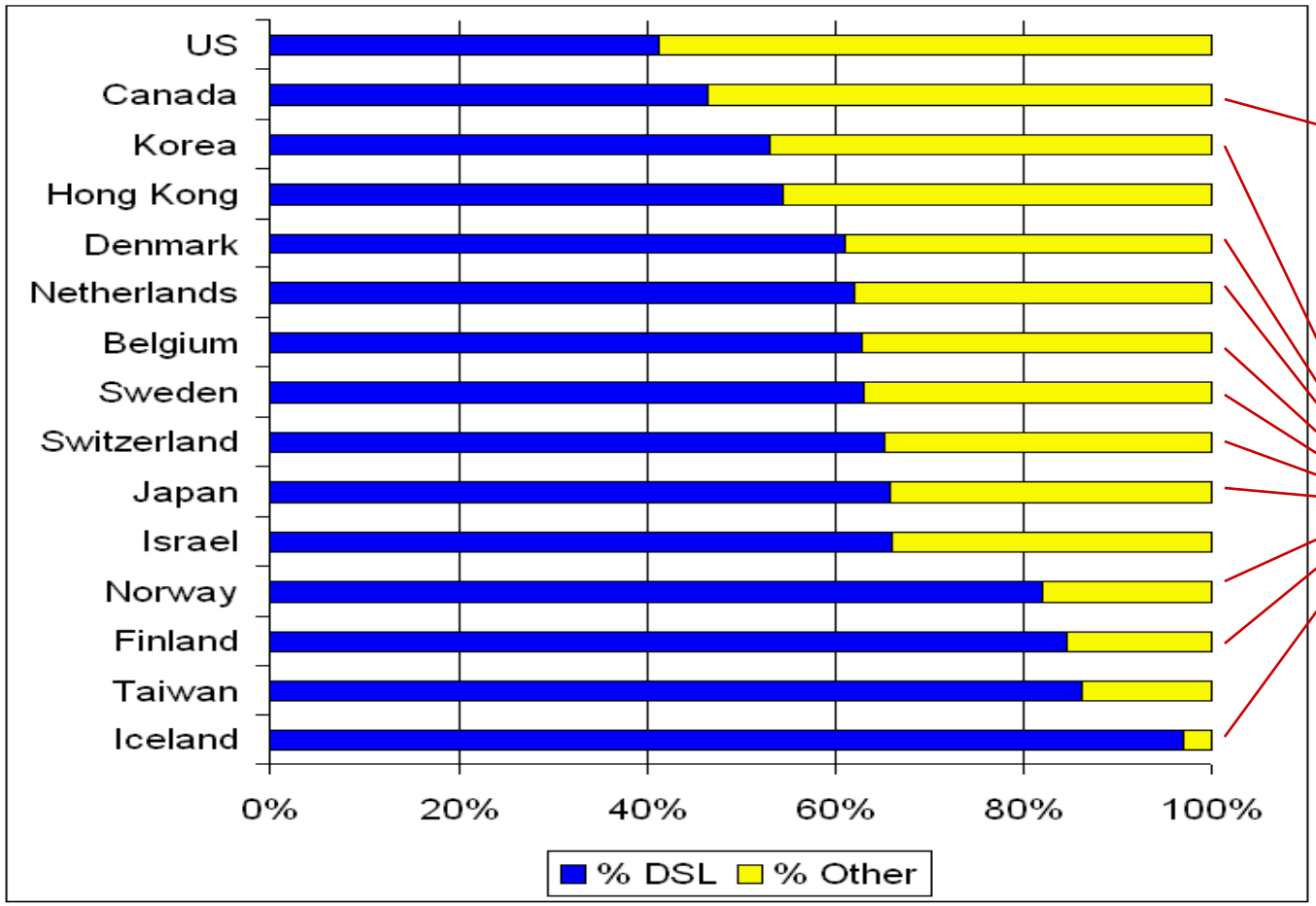
*European Competitive Telecom Association (ECTA), 'Scorecard' 1st quarter 2006.*

The majority of European markets have a small non-DSL infrastructure, and cable penetration – particularly – for most of Europe is at less than 21%.




Cable TV Connectivity 2005 (EU/ IPSOS Study)

# Platform Competition – Few Compare



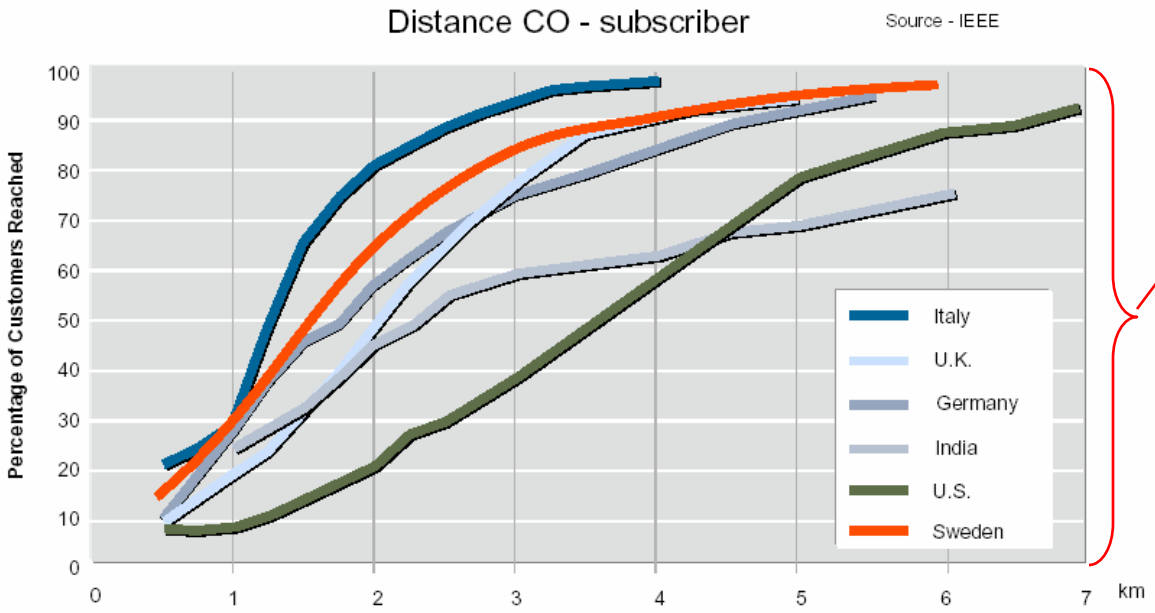

Canada comes closest with, according to the ITU, nearly a 50/50 DSL versus cable/other split.

None of the higher-ranked countries have as much platform competition as the US - in market share of cable and other (yellow) infrastructure as an alternative to DSL (blue).

ITU 2006, http://www.itu.int/osg/spu/newslog/ITU+Broadband+Statistics+For+1+January+2006.aspx

- ***Cable passes 94 percent of US households – US has one third of the world's Wifi hot spots***
- ***Additional options from 3G, fixed wireless, satellite, and broadband over powerline***

# Broadband Speed – the Limits of Copper

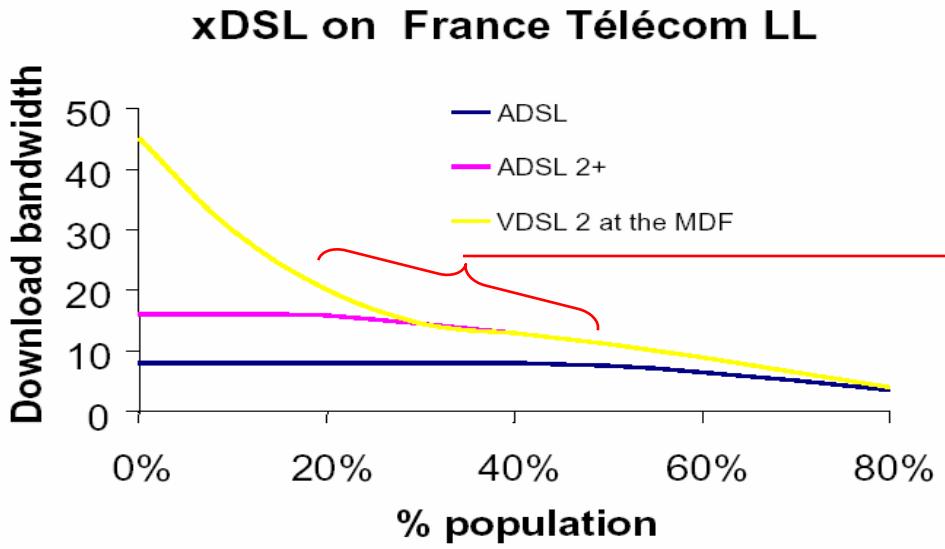



Customers in the US live farther from central offices.

So average loop lengths (the distance that a signal must travel over a copper line from office to customer) are longer here than in other, smaller countries.

For instance – Italy, which has 80% of its customers within 2km – has very short loops.

Short (and conditioned) loops can permit higher speeds over the legacy infrastructure.




However, ***DSL performance is highly dependent on distance***.

As indicated by this example from FT, DSL speeds drop dramatically as loop length increases.

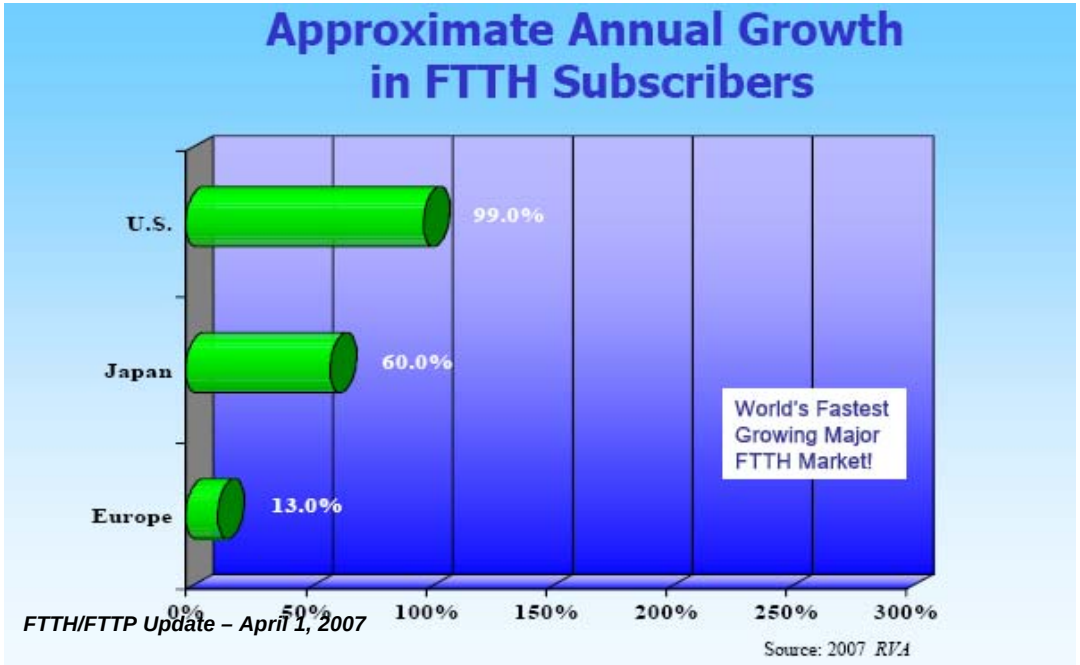
***Countries with short loops have made near-term progress with DSL, but will soon reach the limits of DSL technology***.

# Fiber Future – EU

European Commission: "Broadband transmission speeds vary across the EU, which on average still lag behind the US, Japan and Korea." … "There is a general consensus that competition is a major driver of broadband take-up. Member States such as the Netherlands and Denmark, where there are competing infrastructures, appear to be the best performers." *

* European Commission, Telecommunications Framework 12th Implementation Report, 27 March 2007, at 12 & fn. 18.

# Fiber Future – US




*FTTH/FTTP Update – April 1, 2007*

## *What is Verizon Doing?*

- **FiOS – began in 2005 – an all-digital fiber-optic network that extends to the customers' premises (FTTH / FTTP)**
  - FiOS TV – now offered in 200 cities among 10 states (aiming to have 4 million FiOS TV customers by 2010)
  - "Triple play" – also supports voice and high-speed Internet at up to 100/10 Mbps in more than 1,600 cities in 16 states
  - More capacity for digital & HDTV, and unparalleled IP bandwidth for on-demand & niche programming
  - Unprecedented interactivity to support new business opportunities in voice, data, video, conferencing, etc.

**Verizon CapEx spending on FiOS will total of $23 billion by 2010**

### 4Q'06 Deployment Status:

- Over 6M premises passed in 16 states
- 3.1M premises open for sale

### 2007 Deployment Objectives:

- Pass 9M premises
- 5M premises open for sale

### 2010 Deployment Objectives

- Pass 18M premises by 2010
- 50% of households in footprint

# International Broadband Policy – Wrap-up

- **The US is making good progress in broadband deployment, uptake and advancement**
  - Yes, the OECD statistics do under-represent geographic, business market and technology elements that make the US a success story
    - The OECD statistics do not capture large segments of the business market
    - They do not account for important factors like population density, geographic concentration, and composition of households and businesses
    - Are prices really sustainable, and are countries building a fiber future?
  - The OECD numbers are a snapshot and one way to measure broadband progress – but they fail to provide a comprehensive and valid picture of the real impacts on consumers, the economy
- **Every market has different needs, producing different polices and different results; none are necessarily wrong, but …**
- **There is no doubt that US policies are producing tremendous results**
  - Broadband, particularly a fiber future, requires policies that encourage substantial investment and innovation
  - All seek to foster customer choice in the marketplace, and to this end …
  - Competition, particularly among diverse platforms, is sought by many, accomplished by few



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